

Use the Convert to Number option to change the cell's contents to a number format, or click Ignore Error to keep the text and make the green triangle vanish.

- For more information about Smart Tags, see "Common Formatting Options," p. 95.
- To learn how to check an Excel workbook for errors, see "Checking for Errors in a Worksheet," p. 621.

When you format numbers as Text, Excel ignores them in formulas such as `SUM()` and `AVERAGE()`. It also aligns the cell's contents to the left rather than the right. Unfortunately, applying the Text format requires that you work around an admitted bug that still exists in Excel 2007. If you format the cells first, then apply the Text format, and finally enter the numbers, Excel treats the data as text, just as you intended. However, if you try to apply the Text format to numbers that are already in your worksheet, Excel changes the alignment of the cell, but not the data stored there. After applying the Text format, you must click in each reformatted cell, press F2, and then press Enter to store the number as text. The error-checking tools in Excel 2007 do not identify cells formatted this way, either.

If you format a cell as text and enter a formula in that cell, you see the formula itself rather than its result. To fix the display, change the cell format back to General, select the cell, press F2, and then press Enter.

CHANGING FORMATTING FOR A CELL OR RANGE

In general, as noted previously, Excel stores exactly what you type in a cell. You have tremendous control over how that data appears, however. Number and date formats, for example, give you precise control over commas, decimal points, and whether months and days are spelled out or abbreviated. And if you can't find the precise format you're looking for, Excel lets you create your own custom format.

SETTING NUMBER FORMATS

How should Excel display the contents of a cell? You have dozens of choices, all neatly organized by category on the Number tab of the Format Cells dialog box. Many of these are also available on the Home ribbon, especially in the Number Format drop-down list box and the rest of the Home ribbon's Number group. The Format Cells dialog box gives you the most pinpoint precision over your formats.

To specify exactly how you want the contents of a cell or range to appear, follow these steps:

1. Click the cell you want to format, or select a range, and then open the Format Cells dialog box by pressing Ctrl+1 or by clicking the Format Cells button to the right of the Font group name on your Home ribbon.

TIP FROM

EQ & Woody

Few keyboard shortcuts in all of Office are as useful as Ctrl+1, which opens Excel's Format Cells dialog box. When you're formatting a large or complex worksheet, this key combination can save a startling number of mouse clicks. Even if you generally don't use keyboard shortcuts, this one is worth memorizing. Note that you must use the number 1 on the top row of the keyboard; the 1 on the numeric keypad won't work.

2. In the Format Cells dialog box, choose an entry from the Category list on the left.
3. If the category you selected includes predefined display options such as the Date and Time categories, select one from the Type list. Adjust other format options (currency symbol, decimal point, and so on), if necessary.

TIP FROM

EQ & Woody

To quickly adjust the number of decimal points in a cell or range, make a selection and click the Increase Decimal or Decrease Decimal buttons on the Home ribbon's Number group. Each click adds or subtracts one decimal point from the selection.

4. Inspect the Sample box in the upper-right corner of the Format Cells dialog box to see how the active cell will appear with the format settings you've selected. Click OK to accept the settings and return to the editing window.

The following number format categories are available:

- General, the default format, displays numbers as entered, using as many decimal places as necessary, up to a maximum of 11 digits. It does not include separators between thousands. No additional options are available.
- Number formats let you specify the number of decimal places, from 0 to 30 (the default is 2), as well as an optional separator for thousands, based on the Windows Regional Settings. You can also choose one of four formats for negative numbers (see Figure 19.2).

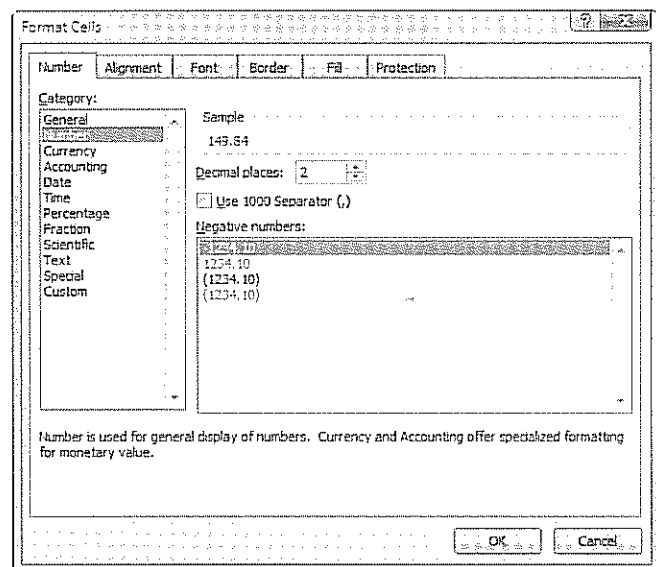


Figure 19.2

- Choices in the Currency category display values using the default currency symbol, as specified in the Regional Settings options of Control Panel. You can adjust the number of decimal places from its default of 2 to any number between 0 and 30 and select a format for negative values (see Figure 19.3).
- Accounting formats are similar to those in the Currency category, except that currency symbols and decimal points align properly in columns and you can't choose a format for negative values.

With Accounting formats, the currency symbol (\$) in U.S. English installations) sits at the left edge of the cell. This effect can be odd in wide columns that contain small numbers; in that case, choose a Currency format instead, if possible (see Figure 19.4).

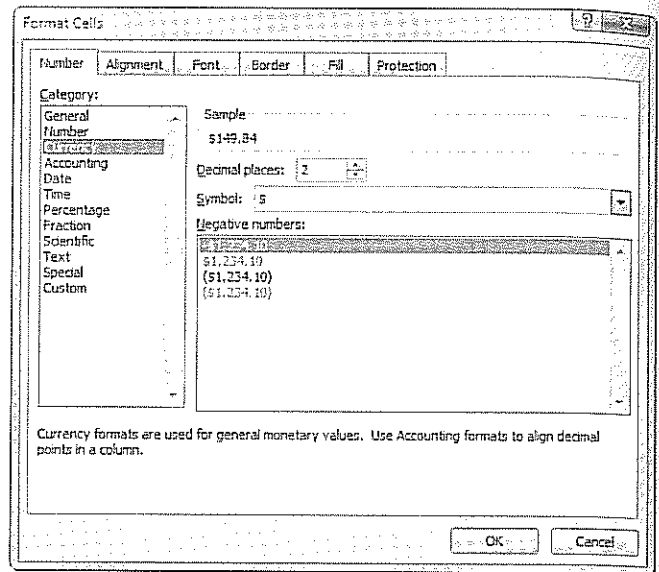
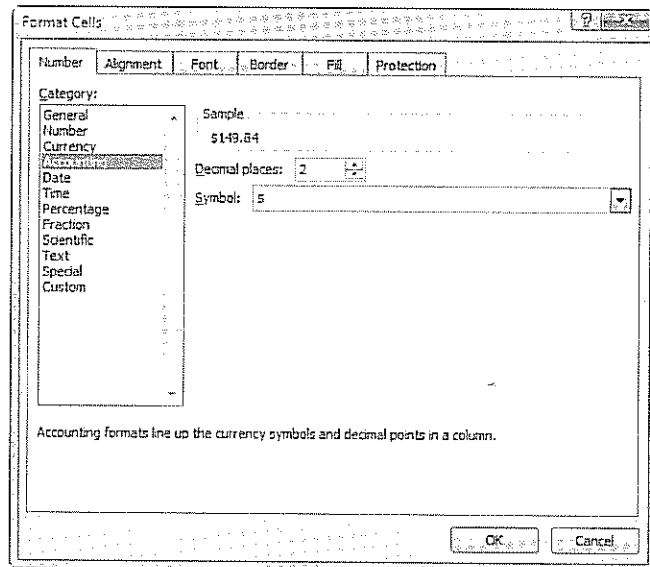


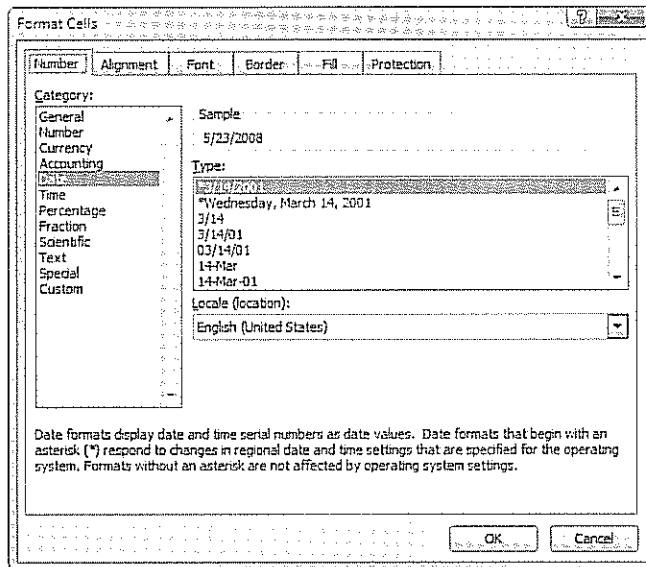
Figure 19.3

Figure 19.4
Use currency symbols, instead of accounting symbols, in wide columns containing small numbers.



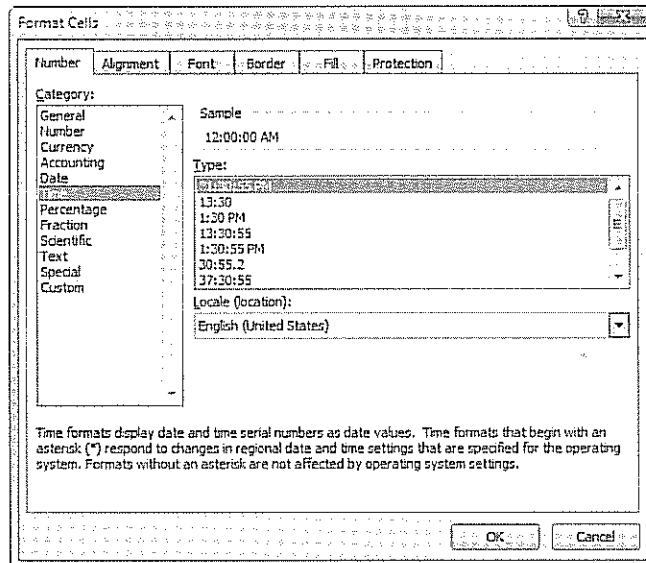
- The Date category includes 15 formats that determine whether and how to display day, date, month, and year. All versions of Excel since Excel 2000 include a pair of Year 2000-compatible date formats that use four digits for the year (see Figure 19.5).

Figure 19.5
Excel includes Year 2000-compatible date formats.



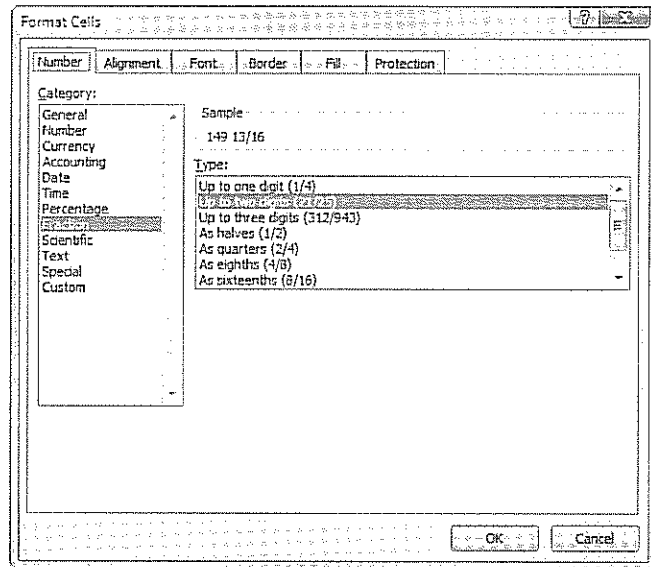
- The Time category includes eight formats that determine whether and how to display hours, minutes, seconds, and AM/PM designators (see Figure 19.6).

Figure 19.6
Excel offers a variety of formats for displaying times.



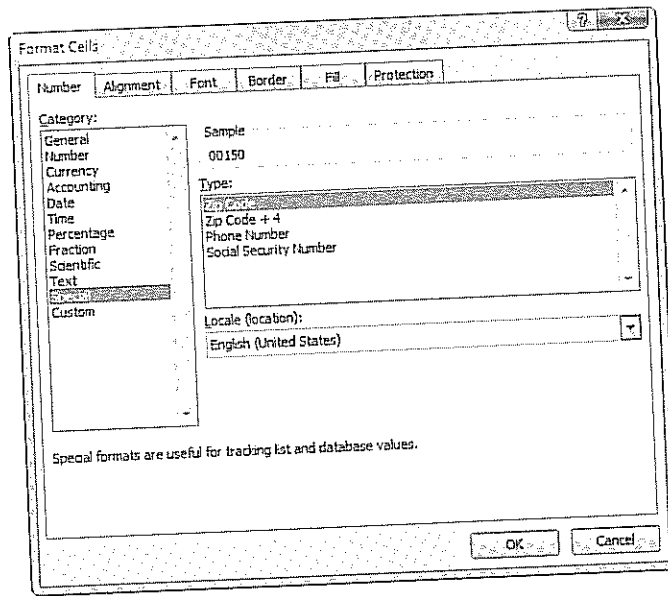
- Applying the Percentage format multiplies the cell value by 100 for display purposes and adds a percent symbol; the only option here lets you specify the number of decimal places, from 0 to 30 (the default is 2).
- Fraction formats store numbers in decimal format but displays cell contents as fractions using any of nine predefined settings; to display stock prices using 8ths, 16ths, and 32nds, click Up to Two Digits in the Type list (see Figure 19.7).

Figure 19.7
Excel displays your fractions as fractions, although it cleverly stores those fractions in decimal format.



- Choose Scientific to display numbers in scientific notation; you select the number of decimal places, from 0 to 30.
- Applying the Text format displays cell contents exactly as entered, even if the cell contains numbers or a formula.
- The four choices in the Special category allow you to select formats for long and short U.S. ZIP Codes, phone numbers, and social security numbers. You enter the number without any punctuation, and Excel adds hyphens and parentheses as necessary for display purposes only (see Figure 19.8).
- Choose the Custom option to define your own display rules. Start with a built-in format and use symbols in the formatting instructions; see “Custom Number Formats” later in this chapter for more details on custom number formats.

Figure 19.8
The special category formats are lifesavers when you need to enter ZIP Codes, phone numbers, and social security numbers.



SETTING DATE AND TIME FORMATS

Normally, Excel stores exactly what you type into a cell. That's not the case when you type a recognizable date or time, however; when storing date and time information, Excel first converts the value you enter into *Serial Date format*. This numeric transformation explains how Excel can perform calculations using date and time information. Understanding the following facts is crucial to working effectively with Serial Date formats:

- Excel converts the date to a whole number that counts the number of days that have elapsed since January 1, 1900. Thus, the serial date value of December 31, 2008 is 39813.
- When you enter a time (hours, minutes, and seconds), Excel converts it to a fractional decimal value between 0 (midnight) and 0.999988 (11:59:59 p.m.). If you enter a time of 10:00 a.m., for example, Excel stores it as 0.416667.
- If you combine a date and time, Excel combines the serial date and time values. Thus, Excel saves December 31, 2008 10:00 a.m. as 39813.42.

NOTE

When you enter only a date, Excel converts it to a serial value and uses 0 (or 12:00 a.m.) as the time value. If you enter only a time, Excel tacks on a date value of 1; if you later format this cell to show the date and time, Excel displays the nonsense date 1/0/1900.

The transformation to a serial value happens as soon as you enter a date or time value in a cell. At the same time, Excel automatically applies the default Date or Time format to your cell so that the data you enter displays correctly. You can choose a different Date or Time